

# Program Assessment - Department of Botany

Department of Botany  
Tom A. Ranker



## Introduction

We report here our initial steps of devising and implementing assessment for the undergraduate degree programs of the UH Manoa Department of Botany. We began the process during a full-day faculty retreat during with Marlene Lowe and Monica Stitt-Bergh of the UH Assessment Office provided their expertise to guide us through the process of devising meaningful programmatic SLOs and curriculum maps.

## BS Student Learning Outcomes

1. Students can define and describe the evolution, anatomy, morphology, systematics, genetics, physiology and ecology of plants.
2. Describe the unique ecological and evolutionary features of the Hawaiian flora.
3. Students can identify and analyze scientific problems and environmental issues using oral and written communication skills.
4. Students can generate and test hypothesis, make observations, and collect data in the laboratory and in the field and analyze and interpret these results, derive conclusions, and report their findings.
5. Demonstrate expertise in contemporary research methods.
6. Describe how all scientific knowledge is continually developing and is dynamic; students can find new information and compare it with existing information.

## Curriculum Map

BS Botany Courses	Program Outcomes					
	1	2	3	4	5	6
BIOL 171/L	I	I		I	I	I
BIOL 172/L					R	R
BIOL 265/265L	R	I	I	R	R	R
BIOL 275/275L					R	R
BIOL 375/375L	R	I	I	R	R	R
BOT 201/201L	R					R
BOT 350		R	R			R
BOT 351/351L	R	R	R		R	R
BOT 410/410L	M				R	R
BOT 430/430L	M				R	R
BOT 450	R	MA	M			MA
BOT 453	MA	R	MA	MA	MA	M
BOT 454	MA	R	MA	MA	MA	MA
BOT 456	M		MA			M
BOT 461	MA	R			R	R
BOT 462	M	R	R		R	MA
BOT 470/470L	MA		MA	MA	MA	M
BOT 480	M	M			R	R

Key:  
I = Introduced  
R = Reinforced  
M = Mastered  
A = Assessed

## Findings

We have completed the initial steps of creating programmatic SLOs for each of our three undergraduate degrees (BA Botany, BS Botany, and BS Ethnobotany) and the associated curriculum maps. By going through this process, we have realized that we need to revise some of our courses, create new courses, and eliminate two courses. Courses were eliminated that were not useful for helping meet SLOs or where course content could be combined with another course to make meeting SLOs more efficient.

## Next Steps

New courses are being proposed that specifically address SLOs 3-6 more effectively than current courses.

Develop and implement tools for assessing success of achieving learning outcomes.

